

## VERIFIED DEVICES WHICH MAY BE APPLICABLE FOR SOLID WASTE COLLECTION VEHICLES

Devices verified as of August 1, 2003 that may be applicable for use in solid waste collection vehicles are listed below. These products apply to engines that are four-stroke and turbocharged, and may have operational restrictions that apply. You must check with the manufacturer to ensure that the device is applicable for the specific engine family and duty cycle of your vehicle.

The products in the following table are listed by manufacturer alphabetically within PM level category. Level 1 verification refers to those products achieving at least 25% or greater reduction in particulate matter. Level 3 verification refers to products achieving at least an 85% or greater reduction in particulate matter. There are currently no Level 2 verified products.

Engine	Product	Fuel Needed	PM level	NOx	Contact Information
1994 through 1997 model year Cummins M11 and International/Navistar DT466 on-road	Cleaire Longview	15 ppm sulfur diesel	3	25%	<a href="http://www.cleaire.com">http://www.cleaire.com</a>
1994 and newer	Engelhard DPX	15 ppm sulfur diesel	3	n.a.	<a href="http://www.engelhard.com/db/template/engelhard.xml">http://www.engelhard.com/db/template/engelhard.xml</a>
	Johnson Matthey CRT	15 ppm sulfur diesel	3	n.a.	<a href="http://www.jmcsd.com">http://www.jmcsd.com</a>
1994 and newer	Donaldson DOC Spiracle	15 ppm sulfur diesel	1	n.a.	<a href="http://www.donaldson.com/en/index.html">http://www.donaldson.com/en/index.html</a>
1991 and newer	Donaldson DOC Spiracle	CA diesel fuel	1	n.a.	<a href="http://www.donaldson.com/en/index.html">http://www.donaldson.com/en/index.html</a>
	Donaldson DOC	15 ppm sulfur diesel	1	n.a.	<a href="http://www.donaldson.com/en/index.html">http://www.donaldson.com/en/index.html</a>

Additionally, a product manufactured by Engelhard is verified for use with a specified list of natural gas/diesel bi-fuel engines. This verification applies to specific Power Systems Associates engines and to Caterpillar engines which have been converted to bi-fuel operation using the Power Systems Associates and Clean Air Partners bi-fuel retrofit systems.

Clean Air Partners DPX	CAcommercial available diesel fuel	3	n.a.	1994 and newer on-road (limited- bifuel)*	<a href="http://www.cleanairpartners.com">http://www.cleanairpartners.com</a>
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For more detailed information on any of the above devices, or to purchase the products, please contact the manufacturer directly.

New information will be posted to our website as systems are verified. Please check periodically at <http://www.arb.ca.gov/diesel/verdev/verdev.htm> for updates.

\*Bi-fuel refers to a vehicle with two fuel systems (the conventional fuel and an alternative fuel) capable of running on either the conventional fuel (gasoline or diesel) or both the conventional and alternative fuel simultaneously. In this case it refers to CNG and diesel fuel.